REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Claims 2, 8, 13, and 22 are requested to be canceled. Claims 4 – 6 were previously canceled. Claims 3, 17, and 21 have been amended to correct a typographical error. Claims 7, 9, 20, and 27 have been amended to claim only "non-transitory computer readable medium." Claims 1 and 7 have been amended to include features previously presented in dependent Claims 2 and 8 (now canceled). Applicant submits that support for these amendments can be found in the originally filed application.

Claims 1, 3, 7, 9-12, 14-21, and 23-27 remain pending in the present application.

I.   Claim Rejections under 35 U.S.C. § 112

On page 2 of the Office Action, Claims 21-26 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has amended Claim 21 to address this rejection. Applicant has also amended Claim 3, in a similar fashion. Accordingly, Applicant respectfully requests withdrawal of this rejection.

II.   Claim Rejections under 35 U.S.C. § 101

On page 2 of the Office Action, Claims 7-9, 20 and 27 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 7, 9, 20, and 27, drawn to a computer readable medium ("CRM"), stand rejected under 35 U.S.C. §101 as "directed to non-statutory subject matter." Applicant respectfully disagrees. *Nuijten* holds that claims solely reciting "physical but transitory forms of signal transmission such as radio broadcasts, electrical signals through a wire, and light pulses through a fiber-optic cable" are not directed to statutory subject matter. *In re Nuijten*, 500 F.3d 1346, 1353-1357 (Fed. Cir. 2007). That is, only "Nuijten's signals, *standing alone*, are not 'manufactures' under the meaning of that term in § 101." *Nuijten* at 1357 (Emphasis added).

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Notably, none of the claims at issue in *Nuijten* were CRM claims. To the contrary, the Court in *Nuijten* explicitly points out that the inventor was allowed a claim directed to "'a ***storage medium having stored thereon a signal*** with embedded supplemental data,' where the ***stored signal*** has essentially the encoding properties described above." *Nuijten* at 1351 (Emphasis added). Accordingly, there is no proper basis for the Office Action's blanket allegation that CRM claims lacking the limitation "non-transitory" are *per se* non-statutory subject matter.

The words of a claim must be given their plain meaning unless such meaning is inconsistent with the specification, where plain meaning refers to the ordinary and customary meaning given to the term by those skilled in the art. MPEP §2111.01. "The ordinary and customary meaning of a term may be evidenced by a variety of sources, including the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *See* MPEP §2111.01.

Further, Applicant notes that the Board of Patent Appeals and Interferences (BPAI) has declined, absent evidence to the contrary, to interpret broadly the phrase "computer readable medium" to include propagating signals. See, *e.g., Ex Parte Azuma*, Appeal No. 2009-003902, (B.P.A.I., September 14, 2009); *Ex parte Gutta*, 93 USPQ2d 1025, 1034 (B.P.A.I., August 10, 2009, *precedential*); *Ex parte Daughtrey*, Appeal No. 2008-000202 (B.P.A.I., July 31, 2009). For example in *Daughtrey,* the BPAI held:

> [I]t does not appear that "computer readable medium" had any commonly-recognized understanding in the art at the time of Appellant's invention. As such, we decline to adopt a definition of the phrase "computer readable medium" that broadly includes signals, when the Appellant has clearly stated on the record that he did not intend the phrase to include signals.

Applicant respectfully submits that, in view of the foregoing, a person skilled in the art would not have taken the ordinary and customary meaning of the phrase "computer readable medium" to include embodiments where the medium is solely a propagating transitory signal of

the type found to be non-statutory subject matter in *Nuijten*. Accordingly, there is no proper basis for the rejection under 35 U.S.C. §101.

Solely in the interest of advancing prosecution, Applicant has amended Claims 7, 9, 20, and 27 to recite "a non-transitory computer readable medium." Applicant submits that Claims 7, 9, 20, and 27 cover statutory subject matter under 35 U.S.C. § 101 and are worded according to USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 23 February 2010). Amendment of Claims 7, 9, 20, and 27 to include "non-transitory" is done, however, under protest.

Applicant respectfully submits that the requirement to use "non-transitory" is without authority. Applicant's use of "non-transitory" is to be understood only to remove propagating transitory signals *per se* from the claim scope and does not relinquish rights to all standard computer readable media that are not just propagating transitory signals *per se*. In other words, the meaning of "non-transitory computer readable medium" should be construed to exclude only those types of transitory computer readable media which were found in *Nuijten* to fall outside the scope of patentable subject matter under 35 U.S.C. §101.

III.   Claim Objections

On page 3 of the Office Action, Claims 13 and 22 were objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Claims 13 and 22 have been canceled. Accordingly, Applicant respectfully requests withdrawal of the claim objections.

IV.   Claim Rejections under 35 U.S.C. § 102

On page 3 of the Office Action, Claims 1, 2, 7, 8, 10-12 and 15-20 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,300,887 to Le (hereinafter "Le"). Applicant respectfully traverses this rejection.

A. Le fails to disclose the claimed "receiving, at the first network element, a portion of the header compression state information from the mobile node."

Independent Claim 1 as amended recites in part "receiving, at the first network element, a portion of the header compression state information from the mobile node." Claim 7, although of different scope, contains a similar element. Independent Claim 15 recites in part "sending at least a portion of header compression state information from the mobile node to the first network element as part of the handoff procedure." Independent Claim 20, although of different scope, contains a similar element. On pages 4 and 5 of the Office Action, the Examiner asserts that Figure 5 and Col. 2, ll. 30-65 and Col. 3, ll. 25-44 teach these elements. In the Advisory Action, the Examiner reasserts that Col. 3, ll. 25-44 and Figure 5 teach this element. Applicant respectfully disagrees and submits that the cited portions of Le fail to disclose both the claimed "receiving, at the first network element, a portion of the header compression state information from the mobile node" and "sending at least a portion of header compression state information from the mobile node to the first network element as part of the handoff procedure."

Le is generally directed to "relocating [] header compression/decompression functions between a plurality of network entities and mobile compressors and/or mobile decompressors." Abstract. Relocating header compression/decompression functions involves "the transfer of compression and decompression context information from one ANI (old) to another ANI (new) to achieve seamlessness, e.g. if mobile terminals 130 and/or 150 move and are handed off from ANI 110 to ANI 120." Col. 17, ll. 38-40. Thus, the distinction between an old ANI, such as 110, and a new ANI, such as 120, is critical.

On page 3 of the Office Action, the Examiner asserts that the claimed "first network element" is analogous to the "Access Network Infrastructure (ANI) 120 or new ANI, as described on 17:25-55 [of Le]." Further, on pages 3 and 4, the Examiner asserts that the claimed "second network element" is analogous to the "second/old network elements/ANI."

The Examiner asserts that Col. 3, ll. 25-44 of Le teach the claimed "receiving, at the first network element, a portion of the header compression state information from the mobile node." Col. 3, ll. 24-44 of Le provide::
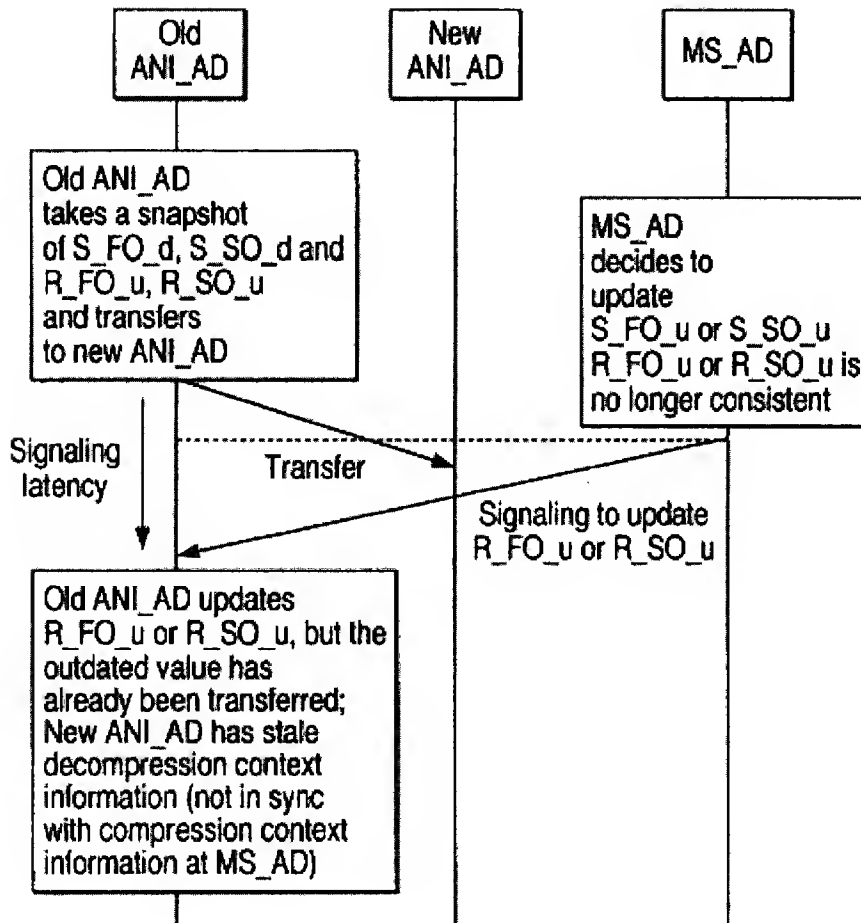
> First Order (FO): Contains minimal header information (e.g. Type 3 fields), compressor/decompressor specific control fields (specific to the compression algorithm in use), and information describing changes in current FOD fields. An FO packet is basically an SO packet (described below), with additional information that establishes new FOD information for one or more Type 2 fields at the decompressor. If the header compression is being applied to a VoIP (voice over internet protocol) stream, transmission of an FO packet might be triggered by the occurrence of a talk spurt after a silence interval in the voice. Such an event results in some unexpected change in the RTP timestamp value, and a need to update the RTP time stamp at the receiver by a value other than the current FOD. The size of FO packets depends on the number of Type 2 fields whose first order difference changed (and the amount of the absolute value of each change). When the compressor transmits FO packets, it is said to be in the 'FO state'.

Thus, this section of Le discloses a first order header, which corresponds to Type 3 information. An example of when first order header is sent is when there is a talk spurt after a silence in a VoIP stream. Further, these headers are sent when there is a "[l]oss of synchronization ... between the compressor and decompressor." Applicant submits that the Examiner is misapplying the teachings of Le. This section of Le describes a type of header that is sent between a compressor and a decompressor, when the compressor and decompressor are not in sync. Applicant asserts that a description of a first order header information or sending a first order header based upon events in a VoIP stream are not the same as the claimed "receiving, **at the first network element, a portion of the header compression state information** from the mobile node" (Emphasis added) or the claimed "sending at least a portion of header compression state information from the mobile node to the first network element as part of the handoff procedure."

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The Examiner also asserts that Figure 5, provided in full below, illustrates "receiving, **at the first network element, a portion of the header compression state information** from the mobile node." (Emphasis added). Applicant submits that the Examiner is taking an inconsistent position. As noted above, the Examiner asserts that the claimed "first network element" is analogous to the "Access Network Infrastructure (ANI) 120 or new ANI, as described on 17:25-55 [of Le]." However, in Figure 5, clearly the ANI 120 is not receiving "a portion of the header compression state information." In contrast, the old ANI 110 is what is receiving information from the mobile, which the Examiner previously analogized, on pages 3 and 4 of the Office Action, to the second network element.

In addition, the Examiner is improperly combining a prior art reference, illustrated in Figure 4, with the teachings of Le. Figure 5 "illustrates the **problem of state content information caused by signaling latency.**" Col. 16, ll. 18-19. (Emphasis added). Le "addresses the following problems: Problem 1 – The old ANI_AD must be able to correctly store S_d and R_u and transfer them to the new ANI_AD; the problem is that due to the time signaling latency, they may be inconsistent with the compressor's view at the time of storage as described below with reference to, for example, **FIGS. 5**, 6, and 7." Col. 20, ll. 26-32. (Emphasis added). Accordingly, Le is directed toward a solution to the problem that Figure 5 illustrates. The Examiner, therefore, is impermissibly combining two separate and distinct inventions. The Applicant, therefore, submits that the Examiner has not met a *prima facie* case of anticipation.

FIG. 5

```
    Old              New              MS_AD
  ANI_AD           ANI_AD
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Old ANI_AD
takes a snapshot
of S_FO_d, S_SO_d and
R_FO_u, R_SO_u
and transfers
to new ANI_AD

MS_AD
decides to
update
S_FO_u or S_SO_u
R_FO_u or R_SO_u is
no longer consistent

Signaling
latency

Transfer

Signaling to update
R_FO_u or R_SO_u

Old ANI_AD updates
R_FO_u or R_SO_u, but the
outdated value has
already been transferred;
New ANI_AD has stale
decompression context
information (not in sync
with compression context
information at MS_AD)

Finally, on page 3 of the Office Action, the Examiner asserts that Col. 2, ll. 30-65 also teach the claimed element of "receiving, at the first network element, a portion of the header compression state information from the mobile node." Col. 2, ll. 30-65 of Le provide:

> IP/UDP/RTP header compression schemes, as described for
> example in RFC 2508, S. Casner, V. Jacobson "Compressing
> IP/UDP/RTP Headers for Low Speed Serial Links, Internet
> Engineering Task Force, February 1999, which is incorporated
> herein by reference in its entirety, take advantage of the fact that
> certain information fields carried in the headers either 1.) do not
> change ('Type 1' header fields) or 2.) change in a fairly predictable
> way ('Type 2' header fields). Other fields, referred to as 'Type 3'

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> header fields, vary in such a way that they must be transmitted in some form in every packet (i.e. they are not compressible).
>
> Examples of Type 1 header fields are the IP address, UDP port number, RTP SSRC (synchronization source), etc. These fields need only be transmitted to the receiver/decompressor once during the course of a session (as part of the packet(s) transferred at session establishment, for example). Type 1 fields are also called 'unchanging' fields.
>
> Examples of Type 2 header fields are the RTP timestamp, RTP sequence number, and IP ID fields. All have a tendency to increment by some constant amount from packet (n) to packet (n+1). Thus, there is no need for these values to be transmitted within every header. It is only required that the receiver/decompressor be made aware of the constant increment value, hereafter referred to as the first order difference (FOD), associated with each field that exhibits this behavior. Receiver/decompressor utilizes these FODs to regenerate up-to-date Type 2 field values when reconstructing the original header. Type 2 fields are part of 'changing' fields.
>
> It should be emphasized that, on occasion, Type 2 fields will change in some irregular way. Frequency of such events depends on several factors, including the type of media being transmitted (e.g., voice or video), the actual media source (e.g., for voice, behavior may vary from one speaker to another), and the number sessions simultaneously sharing the same IP-address.

Thus, Le discloses three types of data contained in header fields. Type 1 information does not change, while Type 2 information changes in a predictable way. This portion of Le is silent in regard to "header compression state information." This portion also fails to mention "sending" or "receiving" "a portion of the header compression state information." Applicant asserts that a description of Type 1 and Type 2 information is not the same as the claimed "receiving, at the first network element, a portion of the header compression state information from the mobile node" or the claimed "sending at least a portion of header compression state information from the mobile node to the first network element as part of the handoff procedure."

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For at least the above reasons, Applicant respectfully requests the withdrawal of the rejection from the pending claims.

VI. Allowable Subject Matter

On page 5 of the Office Action, the Examiner notes that Claims 3 and 14 are allowed, and that "Claims 21 and 24-26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, 2nd paragraph, set forth in this Office action." As noted above, Applicant asserts that these rejections have been overcome. Applicant thanks the Examiner for indicating the allowability of these claims.

*   *   *

Applicant submits that, for at least the foregoing reasons, all claims of the present application are patentable over the cited prior art. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by the credit card payment instructions in EFS-Web being incorrect or absent, resulting in a rejected or incorrect credit card transaction, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date___November 18, 2010_____   By _____

FOLEY & LARDNER LLP   Paul S. Hunter
Customer Number: 23524   Attorney for Applicant
Telephone: (608) 258-4292   Registration No. 44,787
Facsimile: (608) 258-4258